

ABSTRACT

**Lithographic Apparatus, Device Manufacturing Methods,
and Computer-Readable Storage Medium**

5

The change in a property of a lithographic apparatus, in a preferred embodiment the change in magnification of the projection system due to lens heating effects, is predicted and when the change since the last time an alignment process was performed is greater than a threshold, an additional alignment process is carried out. A realignment is triggered when the 10 predictive correction, and hence the error in it, becomes larger than a desired maximum. This avoids unnecessary realignments but ensures that an alignment does occur when likely errors are out of permitted ranges.

Fig. 2

15